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10/756,919	01/14/2004	Yen-Fu Chen	AUS920031038US1	3766

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EXAMINER
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ABDI, AMARA

ART UNIT	PAPER NUMBER
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2624

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06/19/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/756,919

Applicant(s)

CHEN ET AL.

Examiner

Amara Abdi

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u>                                    | 6) <input type="checkbox"/> Other: _____                          |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :05/08/2007  
03/06/2007  
02/07/2007.

**DETAILED ACTION**

1. Applicant's response to the last office action, filed May 8, 2007 has been entered and made of record.
2. In view of the Applicant amendments, the objection (specification, page 9, line 27) is expressly withdrawn.
3. Applicant's arguments with respect to claim 1-20 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. The claimed invention is directed to non-statutory subject matter. Claims 1 and 10-15 are rejected.

In claim 1, "**the computer**" should be deleted to be statutory subject matter; and in claims 10-15, "**a computer program product in a recordable-type medium**" must be "A computer readable medium" encoded with "a computer program" to be statutory subject matter.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

7. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Ito et al. (US 6,694,056).

**(1) Regarding claim 1:**

As shown in figures 15,16 and 17, Ito et al. disclose a method for performing handwriting recognition (column 1, line 12) for handwritten characters of a language (column 1, line 12-15) having character stroke order rules (column 1, line 16-18), the method comprising the computer (column 1, line 13-14) implemented steps of:

storing a plurality of respective reference parameter sets character in a reference character dictionary (102 in figure 17, column 13, line 29-33), wherein each of the plurality of respective reference parameter sets corresponds to a reference character stroke of a reference character (column 2, line 2-3), wherein each of the plurality of respective reference parameter sets has an associated reference sequence number (column 13, line 61-63; and column 17, line 4), (the reference sequence number is read as the stroke number);

receiving a stroke parameter set derived from user input of a handwritten stroke (column 12, line 11-16), wherein the handwritten stroke is one of a plurality of strokes required for writing a character (column 2, line 8-9);

identifying a stroke sequence number of the stroke parameter set (column 12, line 46-48), (the sequence number is read as the character number); and

responsive to identifying the stroke sequence number (column 12, line 49-54), comparing the stroke parameter set with at least those of the plurality of responsive reference parameter sets having their associated reference sequence number equal to the stroke sequence number (column 12, line 59-65), wherein the comparing excludes at least one of the plurality of respective reference parameter sets (108 in figure 1; column 2, line 38-39), (the term exclude is read as "ignore", and the examiner has interpreted the excluding of at least one of the plurality of reference parameters when the evaluation value shows poor much between the stroke candidate and the reference character stored in the character dictionary).

**(2) Regarding claim 2:**

Ito et al. disclose the step of storing includes:

Maintaining each of the plurality of respective reference parameter sets in a plurality of respective field of a table (column 8, line 29-32), (the plurality of fields of a tables is read as area information) wherein the stroke sequence number is derived from one of the plurality of respective fields (column 9, line 17-20).

**(3) Regarding claim 3:**

Ito et al. disclose the method, where the step of identifying includes:

Incrementing a counter value on receipt of the stroke parameter set (column 10, line 34-35), (the term incrementing is read as "adding"), the counter value corresponding to the stroke sequence number (column 10, line 25-29).

**(4) Regarding claim 4:**

Ito et al. disclose the method, where the step of comparing further includes:

excluding each of the plurality of respective reference parameter sets (column 2, line 44), where the associated reference sequence number for each of the plurality of respective reference parameter sets excluded is not equal to the stroke sequence number (column 10, line 54-59), (the examiner interpreted that the stroke information contains the plurality of reference parameters, also the examiner interpreted that when the reference parameter set having an associated reference sequence number that is different then the stroke sequence number indicates a poor match, as result it will be excluded (ignore) from the search target)

**(5) Regarding claim 6:**

Ito et al. disclose the method, where the step of comparing further includes:

Comparing with the stroke parameter set at least one of the plurality of respective reference parameter sets (column 2, line 12-14), where the associated reference sequence number is within one increment of the stroke sequence number (column 12, line 57-67).

**(6) Regarding claim 7:**

Ito et al. disclose the method, where the step of storing includes:

Storing the respective reference parameter sets of a plurality of characters in the reference character dictionary (column 7, line 60-61; and column 8, line 23-25).

**(7) Regarding claim 8:**

Ito et al. disclose the method, where each of the respective reference parameter sets of the plurality of characters is stored in one of a plurality of respective records of the reference character dictionary (column 7, line 60-61), and where each of the plurality of respective records includes a data element value equal to a number of constituent strokes of the reference character (column 12, line 59-65).

**(8) Regarding claim 9:**

Ito et al. disclose the method further including:

excluding from the comparing step, at least one of the plurality of respective reference parameter sets of at least one of the plurality of respective records (column 2, line 44), where the data element value of the plurality of respective reference parameter sets excluded is less than the stroke sequence number (column 10, line 54-59), (the examiner interpreted that when the reference parameter set having an associated reference sequence number that is different then the stroke sequence number indicates a poor match, as result it will be excluded (ignore) from the search target).

**(9) Regarding claim 10:**

Ito et al. disclose a computer program product in a recordable-type medium for performing handwriting recognition (column 1, line 12-16) of a language having character stroke order rules (column 1, line 16-18) comprising:



A reference character dictionary including a first record defining a reference character (102 in figure 17, column 13, line 29-33), the first record including a plurality of reference parameter sets (column 2, line 1-2), each of the plurality of reference parameter sets respectively defining stroke attributes of a stroke of a reference character (column 2, line 2-3), each of the plurality of reference parameter sets being associated with a reference sequence number (column 13, line 61-63; and column 17, line 4), (the reference sequence number is read as the stroke number);

First Instruction for receiving a stroke parameter set derived from a first handwritten character stroke (column 12, line 11-16) and for identifying a stroke sequence number in which the first handwritten character stroke was input by the user (column 12, line 46-48), (the sequence number is read as the character number),

Second instruction, responsive to identifying the stroke sequence number (column 12, line 49-54), for comparing the stroke parameter set with at least one of the plurality of reference parameter sets wherein the reference sequence number of the plurality of reference parameter sets compared is equal to the stroke sequence number (column 12, line 59-65), and

Third instruction for excluding at least one of the plurality of reference parameter set from the comparison step wherein the reference sequence number of the plurality of reference parameter sets excluded is not equal to the stroke sequence number (108 in figure 1; column 2, line 38-39), (the term exclude is read as "ignore", and the examiner has interpreted the excluding of at least one of the plurality of reference parameters

when the evaluation value shows poor much between the stroke candidate and the reference character stored in the character dictionary).

**(10) Regarding claim 11:**

Ito et al. disclose the computer program product (column 1, line 12-16), where each of the plurality of reference parameter (see the Abstract, and column 2, line 1-2) sets is stored in one of a plurality of respective fields of the reference character dictionary (column 13, line 29-33), the reference sequence number determined by one of the plurality of respective fields (column 13, line 61-63), (the reference sequence number is read as the stroke number).

**(11) Regarding claim 12:**

Ito et al. disclose the computer program product (column 1, line 12-16), where the first instruction identify at least one of the plurality of reference parameter sets (column 7, line 61), where the associated reference sequence number of the at least one reference parameter identified set (column 13, line 61-63) has a value within one increment of the stroke sequence number (column 10, line 34-35), and where the second instruction compare the stroke parameter set with the at least one reference parameter set identified (column 2, line 12-14).

**(12) Regarding claim 13:**

Ito et al. disclose the computer program product (column 1, line 12-16), where the first record includes a data element value specifying a number of constituent strokes of the reference character (column 8, line 8-11), (the data element value is read as a stroke information).

**(13) Regarding claim 14:**

Ito et al. disclose the computer program product (column 1, line 12-16), where the reference character dictionary includes a second record having at least one second reference parameter set defining attributes of a second handwriting character stroke of a second reference character (column 2, line 2-3), (the examiner interpreted the defining of a second handwriting stroke as the same concept as the defining of the first handwriting stroke) and a data element value specifying a number of constituent strokes of the second reference character (column 8, line 8-11), where the third instructions, responsive to a determination that the number of constituent strokes of the second reference character is less than the stroke sequence number (column 12, line 49-54), exclude the second reference parameter set of the second record from the comparison step (column 2, line 38-39).

**(14) Regarding claim 15:**

Ito et al. disclose the computer program product (column 1, line 12-16), where the first instructions, responsive to receiving the stroke parameter set (column 12, line 11-16), increment a counter that identifies the stroke sequence number (column 10, line 34-35), (the term incrementing is read as "adding").

**(15) Regarding claim 16:**

Ito et al. disclose a data processing system (column 1, line 61) comprising:

A reference character dictionary including a record having a plurality of reference parameter sets (column 2, line 1-2), each defining reference attributes of a respective stroke of a reference character (column 2, line 2-3), each of the plurality of reference

parameter sets having an associated reference sequence number (column 13, line 61-63; and column 17, line 4), (the reference sequence number is read as the stroke number);

A memory that contains a set of instructions (column 1, line 63-65), (the examiner interpreted that it's inherent for the system to contain a memory since it has a computer-readable storage medium); and

A processing unit (109 in figure 1; column 12, line 4), (the processing unit is read as the word detecting unit), responsive to executing the set of instructions, for receiving a stroke parameter set describing handwriting attributes of a handwritten stroke (column 12, line 11-16), and for determining a stroke sequence number in which the handwritten stroke was input (column 12, line 46-48), (the sequence number is read as the character number), responsive to determining the stroke sequence number (column 12, line 49-54), comparing the stroke parameter set with at least one of the plurality of reference parameter sets where the associated reference sequence number of at least one of the plurality of reference parameter sets is equal to the stroke sequence number (column 12, line 59-65), the comparing step excluding at least one of the plurality of reference parameter sets where the associated reference sequence number is not equal to the stroke sequence number (column 2, line 38-39).

**(16) Regarding claim 17:**

Ito et al. disclose a data processing system (column 1, line 61), where the plurality of reference parameter sets are maintained in fields of a table (column 8, line 29-32), (the plurality of fields of a tables is read as area information), the set of

instructions determining the associated reference sequence number of at least one of the plurality of reference parameter sets by the fields of the table in which the plurality of reference parameter sets are maintained (column 8, line 18-20).

**(17) Regarding claim 18:**

Ito et al. disclose a data processing system (column 1, line 61), where the set of instructions are adapted to identify at least one of the plurality of reference parameter sets (column 7, line 61), where the reference sequence number of the at least one reference parameter set identified is within a predefined value of the stroke sequence number, and responsive to identifying at least one of the plurality of reference parameter sets (column 10, line 34-35), compare the stroke parameter set with the at least one of the plurality of reference parameter sets identified (column 2, line 12-14).

**(18) Regarding claim 19:**

Ito et al. disclose a data processing system (column 1, line 61), where the reference character dictionary includes a second record having a data element value indicating number of constituent strokes of a second reference character (column 2, line 2-3), (the examiner interpreted the defining of a second handwriting stroke as the same concept as the defining of the first handwriting stroke), the second record further having at least one second reference parameter set (column 8, line 8-11), the set of instructions, responsive to determining the data element value is less than the stroke sequence number (column 12, line 49-54), excluding the at least one second reference parameter set of the second record from the comparing step (column 2, line 38-39).

**(19) Regarding claim 20:**

Ito et al. disclose a data processing system (column 1, line 61), where the record includes a data element value indicating a number of constituent strokes of the reference character (column 8, line 8-11), the set of instructions, responsive to reading the data element value (column 8, line 8-11), determining at least one of the plurality of reference parameter sets (column 2, line 1-2) to exclude from the comparing step dependent on the data element value (column 2, line 38-39).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. in view Izumi (US 2003/0099398).

Ito et al. disclose all the subject matter as described in claim 1 above.

Ito et al. does not explicitly mention the receiving of indication that the user has knowledge of the character stroke order rule.

Izumi, in analogous environment, teaches character recognition apparatus and method, where the user has knowledge of the character stroke order rule (paragraph [0052], line 6-11).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the handwriting method of Izumi, where the user has knowledge of the character stroke order rules, in the system of Ito et al. in order to provide a character recognition method capable of inputting a pictorial symbol made up of a plurality of character with an improved efficiency (paragraph [0012], line 1-4).

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amara Abdi whose telephone number is (571) 270-1670. The examiner can normally be reached on Monday through Friday 7:30 Am to 5:00 PM E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wu Jingge can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

  
JINGGE WU  
SUPERVISORY PATENT EXAMINER

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Amara Abdi  
06/07/2007